

## Duplicating fit on two bikes

Today's ride was the first test of our Bike Friday's for the upcoming trip to France (July 14th). My experience commuting with my Bike Friday has shown me that something wasn't quite right with the fit; I was having some hamstring issues that would normally indicate a seat too high, but that wasn't the case. So I went through the process below, and what an amazing difference it made! I'll try to get some graphics up soon. --Mike--

**Part 1: Duplicating riding position on both bikes-** I've been commuting to work & back on my own Bike Friday for quite some time now, but really hadn't felt like my position was fully dialed in, so Saturday I had both my Madone and the Bike Friday at the shop and did full centerlines on the Madone (upon which I am extremely comfortable) and the Bike Friday. Complicating things a bit are the different pedals used on each, with Speedplay Zeroes on the Madone and Shimano SPDs on the Bike Friday. As I've become overly sensitive to even millimeter differences in seat height, I couldn't just measure distance from seat to pedal, but had to take into account the differences the pedal platforms make. In the end this wasn't difficult; I just attached shoes to each and measured my Madone from the inside of the shoe (at the insole) to the seat. And then duplicated it on the Bike Friday, taking into account a bit more sag in the Bike Friday's more-padded saddle.

So, if you want to duplicate positioning on your bikes, here are the relevant things to measure, starting with the bike that fits best-

- Top of saddle to inside of shoe insole, measured in line with the seat tube and the spot on the inside of the shoe exactly over the pedal spindle, with the crank also in line with the set tube.
- Saddle setback. For this you need the bike on level ground. Drop a line from the tip of the saddle and measure exactly how far behind the bottom bracket center it falls. This is a really important measurement if you want two bikes to feel the same.
- Nose of saddle to center of handlebar (where the stem clamps it).
- The difference between the top of the saddle & ground, and the top of the handlebar & ground.

Beyond that you have to take into account different handlebar reach (how far forward the bar extends; in nearly every case, less is better with modern brake/shifter levers) and differences in saddle shape. In some cases it will make sense to not "play around" with the saddle much and just install identical saddles on each bike. With handlebars, you can measure the forward reach and make sure they're similar.

That's about it. Do this carefully and you'll be amazed at the results.